

SLT

2008-01-21

Dart Aerospace Ltd.

Date: Thursday, 10/18/2007 7:40:14 AM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STRUT WELDMENT ASS'Y
Job Number : 35160	
Estimate Number : 10564	
P.O. Number :	Part Number : D34433
This Issue : 10/18/2007 S.O. No. :	Drawing Number : D3443 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : B
Previous Run : 33708	Material :
Written By :	Due Date : 10/30/2007 Qty: <i>15</i> Um: Each
Checked & Approved By : <i>107.10.18</i>	
Comment : Est Rev. A 05.11.14 New issue EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description:
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1.0 M304R1500



Comment: Qty.: 0.2500 f(s)/Unit Total : 2.0000 f(s)

ink 106 200 3.5' 20 07/12/06

2.0 HARDINGE

HARDINGE CNC LATHE SMALL



Comment: HARDINGE CNC LATHE SMALL
1-TURN AS PER FOLIO FA588 & DWG D3443
FOLIO REV: *B*
DWG REV: *B*

2-DEBURR AS REQUIRED

20 07/12/06-07

3.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

20 07/12/06-07 (15)

4.0 HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA588 Rev *AA* & Dwg D3443 Rev: *B*

PTO

2-Deburr per dwg D3443

ink 08/01/20

(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-3 PAR #: N/A Fault Category: Prod / Machines ^{parts} NCR: Yes No DQA: D Date: 08/01/29
 QA: N/C Closed: H Date: 08/01/29

NCR: <u>35160</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/01/29	4	2 piece scrap 1 piece, origin wrong place 1 piece, the piece move into inside the 4° axis	<i>[Signature]</i> 08/01/29	Scrap. dis. keep. No replace.	<i>[Signature]</i> 08/01/21	<i>[Signature]</i> 08-01-21	<i>[Signature]</i> 08/01/29	<i>[Signature]</i> 08/01/21

NOTE: Date & initial all entries

Date: Thursday, 10/18/2007 7:40:14 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 35160

Part Number: D34433

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mf 08/01/20

(13)

6.0

MILLING CONV.

CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE

Drill hole as per Dwg D3443.

mf 08/01/20

(13)

7.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mf 08/01/20

(13)

8.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SG 08.01.21

(13)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *WS*

FC 08 01 21

(13)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08.01.21

Job Completion



08/01/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

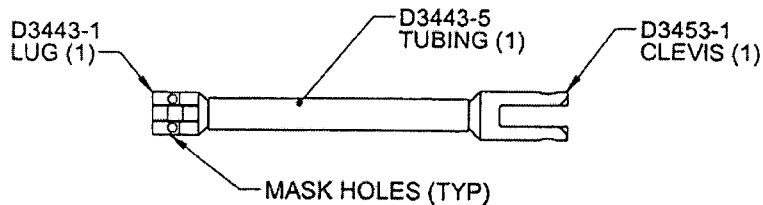
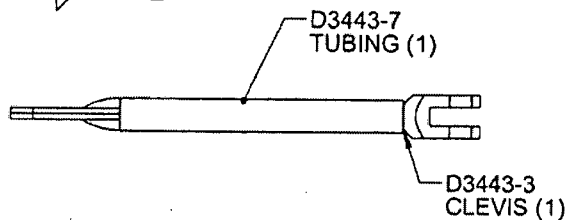
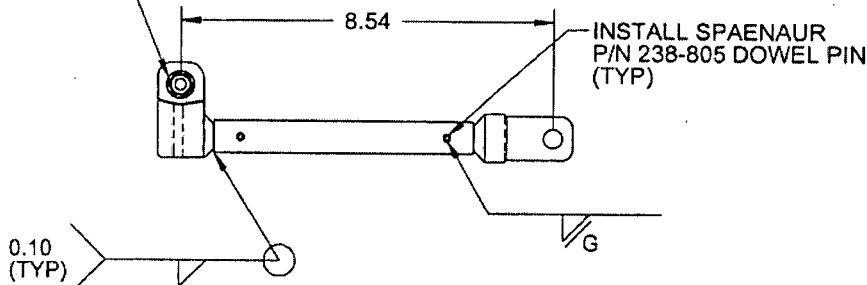
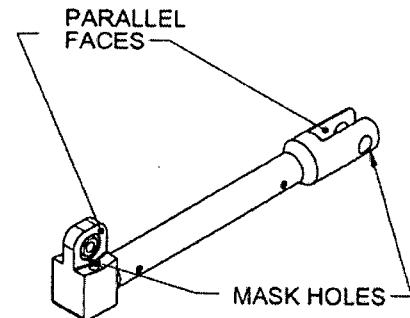
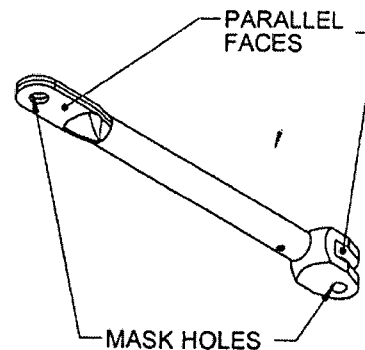
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3443	REV. B SHEET 1 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY		SCALE 1:4
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

RELEASED05.12.09 *[Signature]*PRESS FIT McMASTER-CARR P/N 63215K32
BALL JOINT BEARING AFTER POWDER COATINSTALL SPAENAU P/N 238-805
DOWEL PIN**D3443-041****D3443-043**SHOP COPY
RETURN TO
ENGINEERING**NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **35160**

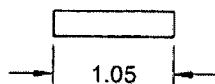
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DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY SCALE 1:2		

$\phi 0.210^{+0.005}_{-0.010}$



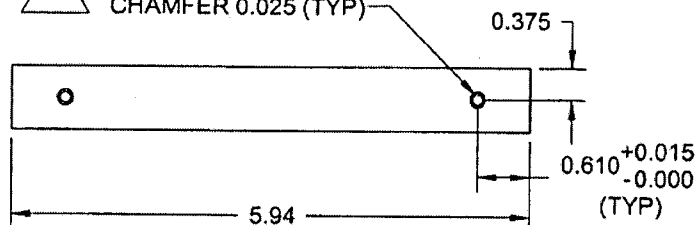
D3443-9 PIN

D3443-9 NOTES:

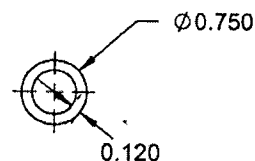
- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES



DRILL $\phi 0.125$ THRU
CHAMFER 0.025 (TYP)

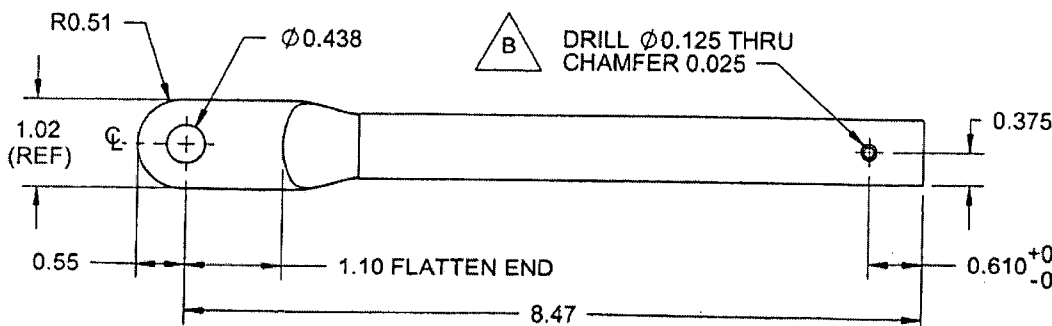
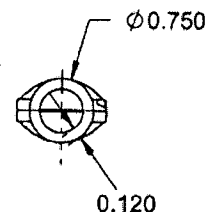
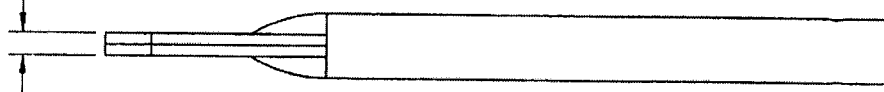


RELEASED
05.12.09



D3443-5 TUBING

$0.260^{+0.000}_{-0.030}$



DRILL $\phi 0.125$ THRU
CHAMFER 0.025

D3443-7 TUBING

D3443-5/-7 NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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WORK ORDER
NO. 35160

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DART AEROSPACE LTD		Work Order:	35160
Description: CLEVIS		Part Number:	D3443-3
Inspection Dwg:	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.438	+ .005	.438	—			
2.70	+/- .030	2.702	—			
R.050(TYP)	+/- .010	R.050	—			
45°(TYP)	+/- .5°	45°	—			
1.500	- .005	1.498	—			
1.00	+/- .030	1.010	—			
1.125	+/- .010	1.135	—			
20°(TYP)	+/- .5°	20°	—			
R.0.450	+/- .010	R.0.447	—			
Ø .375	+/- .005	Ø .379	—			
.720	+/- .010	.727	—			
1.53	+/- .030	1.546	—			
.625	+/- .010	.625	—			
.05x45°	+/- .5°	.055x45°	—			
# 30	+/- .005	.130	—			
.95	+/- .030	.95	—			
1.451	+/- .010	1.442	—			

Measured by: <i>JP</i>	Audited by: <i>BC</i>	Prototype Approval: <i>N/A</i>
Date: <i>07/26/07</i>	Date: <i>08.01.20</i>	Date: <i>—</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

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